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Gaming Simulation Technology in the Development of Professional-creative Competence of Students Learning English

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The aim of this article is to develop educational gaming simulation technology contributing to the achievement and development of students' creative competence as the indicator of their successful self-realization in the profession. The structure of the presented technology includes objective, methodological, content, organizational and technological and result components. The introduction of gaming simulation as an educational technology in the process of the English language training aimed at developing creative educational space which defines the professional-creative competence development of the students – future specialists of foreign language and culture.

Keywords: professional-creative competence, gaming simulation, educational technology, English education.

INTRODUCTION

The relevance of the study

Foreign language training of university graduates is the task of primary importance according to the modern political, economic, social, cultural and educational sectors of the Russian state in terms of international collaboration. Exceptional attention is paid to the quality of foreign language professional education. Modern specialists should possess several foreign languages, be able to

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act as mediator between cultures, exhibiting competence in practice in the sphere of social and professional communication, creative and critical analysis of collective interaction in a multicultural world.

In addition, changes in standards of foreign language studies in higher education, reflected in the Federal state educational standard of higher professional education, stepped up the search for innovative means to improve the quality of foreign language professional education (Utehina, Makhankova & Troinikova, 2013).

The ability to interact is the basis of the formation of the young specialist's competitiveness, which is defined as a socially oriented system of abilities, aptitude and personal qualities, characterizing student's potential in achieving success (in school, professional and other spheres of life), defining adequate individual behavior in a dynamically changing environment, providing internal self-confidence, harmony with oneself and the world he lives in (Panfilova, 2007).

The purpose of this study is to substantiate theoretically and practically prove the possibility of introducing the technology of gaming simulation in English-language education based on the pedagogical conditions revealed in the research. To achieve this goal the following tasks are determined and solved: to reveal the contents of the gaming simulation process; to identify pedagogical opportunities of gaming simulation for foreign language education; to define pedagogical conditions for successful implementation of gaming simulation in foreign language teaching process; to experimentally test the effectiveness of the identified pedagogical conditions of gaming simulation introduction in foreign language teaching process.

MATERIALS AND METHODS

Methodological basis of research is the philosophical concept of playing culture (Huizing, 1997; Orteg-Gasset, 1991; Fink, 2012), psycho-pedagogical concept of playing activities (Elkonin, 1999), theoretical propositions on the cultural approach as a methodological basis for developing the theory and practice of pedagogical, linguistic and philological education (Slastetin, 2008).

Methodological basics of the research were student-centered, activity, context, competence, and integrative approaches.

Theoretical basis of the research is the philosophical foundation of culture (Bachtin, 1979), theory of interpersonal communication (Filimonova, 2009), propositions on intensive methods of teaching foreign language (Arkusova, 2009), the content of innovative educational technologies in foreign language education (Utechina, 2008).

To achieve this goal we have used a set of theoretical and empirical research methods, including: analysis of scientific and pedagogical literature, the method of modeling technology of gaming simulation in teaching English, methods of survey, method of expert estimations, analysis of own pedagogical activity, pedagogical experiment, pedagogical testing, analysis the analysis of students' test results.

The experimental base of the research

The experimental work was carried out at the Institute of Foreign Languages and Literature, Faculty of Udmurt Philology, Faculty of Foreign Languages (Udmurt State University), at the senior level of teaching English at the Linguistic School № 20 (Udmurtia, Sarapul).

The stages of the study

The research was conducted in three stages:

- at the first preparatory stage, we analyzed current state of the problem of professional-creative competence development in pedagogical theory and practice; developed the content of this competence judging from the facts of the students, teachers and future employers survey; developed the programme of research methodology, carried out the search of the necessary pedagogical development funds for the defined components of the professional-creative competence;
- at the second stage – the main stage – pedagogical technology of gaming simulation was developed and implemented in teaching English language; we conducted experimental work to verify the effectiveness of this technology;
- at the third stage – the final stage – systematization, interpretation and synthesis of research results were carried out; theoretical conclusions were improved; the processing and presentation of the results of research were conducted.

RESULTS

The structure and content of pedagogical modeling technology

The developed technology of gaming simulation, aimed at the development of professional-creative competence of students when learning English, includes: target (goals, objectives, aimed at the development of these competencies); methodological (approaches, principles); content (interdisciplinary integration of cultural, professional and linguistic training blocks); organizational and technological (gaming simulation technology, pedagogical conditions) and result components (criteria and indicators levels of development of student professional-creative competence). Let us consider this technology in more detail.

The purpose of the gaming simulation technology is to develop student professional-creative competence within the process of English language teaching as an integrative quality of the individual, including a system of knowledge, special skills and ways of activity, as well as a set of professionally important qualities, providing the opportunity for creative self-realization in English, and the preparedness to deliver professional and creative activity as a specialist of foreign language and culture.

The results of the students' survey (the specialty "Foreign Philology" and "Linguistics"), teachers and future employers, as well as the analysis of scientific literature on the implementation of competence-based approach in foreign language education enabled to design the content of the student competence model at the following levels:

- *socio-perceptual level* (ability to interact in groups, skill to participate in the English-language projects, adequate perception of each other, creating a favorable first impression and mutual understanding);
- *communicative and cognitive level* (high level of English proficiency as a means of interpersonal communication based on understanding of what has been said, the ability to speak correctly, to implement the verbalization and listen, to use English as a means of cognition of the surrounding world);
- *professional and creative level* (development of creative individuality in the English language learning, the formation of receptivity to new phenomena in the language, ability to adapt in a changing cultural linguistic environment).

Important *conditions*, that ensure the effectiveness of the gaming technology introduction in the educational process in general and in the educational process of teaching English in particular, are the following: organization of reasonable types of gaming activities, the spatial environment, the playing field; the opportunity for the students to perform not only managerial, but also the game roles: "opponent", "the realist", "optimist" and "pessimist" based on individual abilities (intellectual and

creative) of each participant. These individual abilities are revealed in the process of interaction during the game; the implementation of interaction in the mode of "normalization " (following the rules of the game, time-limit and other regulations); mandatory-requirement of students' participation in the whole cycle's classes (everyone must pass the whole subject course and game course, from the analysis of situations to participation in large business games); providing innovation (change of roles, change of partners in the team, the variety of playing situations, etc.); the implementation of the idea of individual personal involvement for the participants in the game.

Key methods and techniques used in the gaming simulation technology for the purpose of the professional-creative competence formation are the following: role-playing games with the regulations and specific roles, simulation games, business games, creative interactive methods of interaction.

Based on the analysis of pedagogical conditions, a model of gaming simulation introduction as a pedagogical technology in English education has been developed. *Activating activity* implies two stages: an introduction to the game (the definition of the goals and objectives of the game, participants of the game learn its meaning, conditions), the participants of the game interaction are divided into groups (leader selection, the distribution of roles). *Controversial activity* is implemented through immersion in the game (participants are introduced to the game task), study and systematic analysis of situations and problems (finding information and material for analysis and formulation of the problem). Actually *educational-creative* activity takes place in two stages: the gameplay (search solutions, forecasting potential issues, risks and actions) and General discussion/Plenum (intergroup communication, opposing, exchange of opinions, questions and answers). *Evaluational* activity includes the following three stages: game results (evaluation of solutions and projects), reflection (analysis of his own mental state, defining the difficulties experienced by the participants, their success and personal achievements), "exit" from the game (working out a "checklist" or "lessons to be learned").

Thus, this technology corresponds to the modern state social law of education and it is aimed to English language learners a holistic view of professional and communicative competence, acquisition of materials that simulate professional activities, social experiences, including interpersonal and group interaction.

Stages of the model Implementation

The educational model was introduced during the several stages of the experiment:

- determination of the component composition for the professional-creative competence of the students learning English; distinguishing communicative, professional, creative and perceptual competences and their diagnosis in students, who were trained according to the programs in English education;
- development and implementation of scientific and methodological support, defining an implementation plan for pedagogical technology and educational activities, their content and nature, during professional and creative linguistic development of the individual; the development of appropriate teaching materials; the development and formulation of criteria of professional-creative competence formation;
- direct experimental work on the implementation of gaming simulation in teaching English in educational activities, verification of levels of competences, analysis of the obtained results and preparation of scientific and methodological support for the articles and monographs publication.

The contents of the gaming simulation process

Let us denote the pedagogical possibilities of gaming simulation by identifying the features and results of role playing activity in education. From the point of view of philosophy, the origin and development of human culture takes place through the game, as it provides humans with the perception of significant and relevant things (Huizinga, 1997; Fink, 2012). From a psychological point of view, the game is the means of developing motivational and consuming sphere of knowledge, cognition, mental actions and arbitrary conduct (Elkonin, 1999), it is also the means of getting positive emotions and the means of interpersonal communication (Filimonova, 2009). Thus, the game helps to create a psychologically comfortable environment of creative freedom for the teacher, providing students with the opportunity to choose educational technologies. The game encourages its participants to take independent decisions, improve students' ability to evaluate their actions and the actions of others, develops the ability to analyze their actions and abilities, which has a positive effect on the formation of responsible attitude to educational activity and the increasing demands of himself.

The communicative function of the game is implemented in the form of group work and contributes to the development speech-cognitive activity of students by means of the target language, whereby training becomes communicative in nature. Moreover, in the English education game is supposed to be an educational product of students' educational-creative activity and a means of reflective introduction of this activity results.

The introduction of gaming simulation in foreign language education should be implemented with the following psycho-pedagogical, organizational and methodological conditions of the effectiveness for developing students' professional and creative competence, which include: developing creative atmosphere based on student-centered approach to professional training students; implementation of flexibility, mobility and optimality principles contributing to students' creative professional competence achievement; enriching students with knowledge of creative activity, communicative and creative works of self-realization; integration of psycho-pedagogical skills of students in the learning- creative process into professional and creative skills; formation of the structure of student's creative readiness/preparedness for the professional work via optimal intellectual and spiritual, individual and social, regulatory and creative development.

We give here an example of one of the methods implementation – a gaming simulation "Patent Office", which took place at the annual Student Conference. The participants and guests of the conference were provided with the information about the history of patents, their types and conditions of patentability. Then the participants were invited to simulate the work of the Patent Office in which the participants acted as English researchers in the field of vocational-oriented technologies in language education applying for patents. The speakers presented meaningful and relevant reports in different formats (oral reports of students, the report of the teacher of English from Russia, the report of the teacher of English from the Czech Republic and Finland, etc.).

Listening to the reports, the players filled assessment sheets of the studies. The innovation of this method also lies in the fact that the speakers (researchers) of the conference were evaluated from the perspective of experts from various fields, according to the chosen roles: experts of educational institutions (a director, a head teacher, a school teacher, a kindergarten teacher, a teacher of a private language center), experts in the field of higher education (a specialist of the department of international relations, a member of a scientific laboratory, a representative of the department of the Ministry of Education, Science and Art), experts in the field of

translation (a translator, a member of the Association of Translators of Russia, regional and international associations of interpreters), experts of literary museums (a tour guide, an art historian, an expert, an ethnographer), experts of mass-media (DJ, VJ, a journalist, an interviewer), specialists at the institutions of business and management (a manager of international joint ventures, organizations, offices, departments), specialists on tourism and recreation (a travel agency manager, a tour guide).

The changing of the players roles greatly animated the discussion of the reports. That fact enabled the participants to express their ideas openly, to declare their own views (sometimes provocative one "Is Tutor a computer program?"), to assess the reports on behalf of "other expert" without fear for their possible errors in the interpretation of the facts. It also livened up the work of all the participants of the section and revealed new issues and approaches of the presented reports.

After the discussion, the manager of the section offered the participants to divide into groups according to the selected roles and to choose three of the most successful performances. Students made their choice independently and reasonably based on the assessment sheets of the studies and opinions expressed within the discussion. The participation of the head of section at this stage is latent because the assessment criteria specified the evaluation of the reports, thereby contributing to the objectivity of the evaluation without a teacher' interference in the students' decision. Each group reported on its decision, giving arguments in its favor, after the group decision the winners of the section were determined by polling the votes. The participants were rewarded with diplomas of winners and patents for an invention in different nomination and sphere.

According to the participants, the section of the students conference was perfectly organized: the students have developed a script of the game, multimedia presentation, leaflets with the program of the section, personal invitations to the conference participants, the patents for each speaker, the criteria for research evaluation; a draft-resolution of the section, they specially decorated auditorium for the conference - reading room of the library: on the tables arranged like the letter U there was the program of the section, mineral water, paper, pens and notebooks, assessment sheets; there was an exhibition of scientific literature on the theme of the section, the junior students provided the section with music and video support, video and photo session.

Experimental verification of the effectiveness of using gaming simulation technology

The basis of determining the effectiveness of the proposed gaming simulation technology was criteria for different types of students' activity (method of A.P. Panfilova), namely: socio-perceptual, communicative-cognitive and professional-creative. Before and after the pilot training, students (160 pers.) were asked to fill in a form. Analysis of the implementation of the gaming simulation in the English educational process was conducted taking into account the opinions of three expert groups: a teacher of English acting as an external expert; a researcher, conducting experiential learning; students - participants of the pilot training. Reflection of learning activities based on the results of gaming simulation implementation in the process of English learning in order to create a professional and creative competence was held by the method of A.P. Panfilova (2007), based on the criteria of various types of students' activity: social-perceptual, communicative-cognitive, professional-creative (see. Table 1).

Table 1. Results of diagnostic levels of social-perceptual, communicative-cognitive and professional-creative activity before and after the introduction of the gaming simulation technology, %

Levels	Types of students' activity					
	social-perceptual		communicative-cognitive		professional-creative	
	before	after	before	after	before	after
low	65 %	30 %	28,75 %	15 %	36,25 %	16,25 %
middle	30 %	50 %	61,25 %	50 %	60 %	61,5 %
high	5 %	20 %	10 %	35 %	3,75 %	22,25 %

Social-perceptual activity implied the choice of cooperation strategy, active verbal communication in English, active participation in discussions on behalf of the game roles. Communicative and cognitive activity was determined by the ability to formulate and define the problem in the English language, and the ability to find solutions in educational problems, the ability to offer advice, recommendations and tips to develop. Professional-creative activity involved the assessment of students' activity during the preparation of presentations, linguistic correctness and linguistic improvisation while speaking before the audience, persuasiveness and expressiveness of the statements, ability to solve non-standard problems when speaking English.

DISCUSSIONS

It is necessary to point out that the gaming simulation technology was implemented in different educational disciplines such as psychology (Abramova, 2008), management (Kotljarovki, 2000; Panfilova, 2007; Filimonova, 2009), economy (Orekhov, 2009), pedagogy (Novikov, 2006; Khachaturian, 1989), didactics (Tolkachev, 1999).

Specifically in the context of foreign language teaching gaming simulation was considered as a means to intensify foreign language professionally- oriented communication of students on the basis of authentic texts (Barkova, 2002), a way of simulating game situations for communication (Barkova, 2002), condition for the students' development (Nikulina, 2009).

Furthermore, it is important to note the increasing interest shown by teachers and researchers to the gaming simulation, used in various educational and training purposes. This is evidenced by the subjects of numerous Russian Research Conferences, as well as addresses of the major Russian and foreign Internet sites connected with the gaming simulation in the leading Russian and foreign Internet search systems. But despite the undeniable usefulness of the these studies, the problem of revealing the conditions of game simulation implementation in the educational process of foreign language education, taking into account the specifics of teaching English remains unresolved.

CONCLUSION

As a result of scientific and experimental work, it has been proved that the developed gaming simulation technology in teaching the English language allows us to develop students' social and perceptual, cognitive and communicative, creative professional competence, allowing them to master the system of philological and linguistic knowledge, to solve professional tasks independently and creatively in training and kvaziprofessional conditions.

The article can be useful in practical terms for bachelors, masters in the sphere of "Foreign Philology", "Linguistics", for specialists and managers of educational

institutions in the system of English-language education, in the centers of training and retraining teachers for teaching departments at national cultural centers.

In prospect: development, testing and implementation of cross-cutting technologies in the development of personality creative competence in the system of continuing education (kindergarten - school - high school - adult education); development of scientific and methodological support for distance learning courses aimed at professional-creative competence development and gaming simulation technology introduction.

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